L Number	Hits	Search Text	DB	Time stamp
1	2	5891621.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:46
7	768568	enzyme activity	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:47
13	2414	(enzyme activity) near3 kit	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:48
19	692830	protease activity	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:49
25	948	(protease activity) near3 kit	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:49
37	1	((protease activity) near3 kit) near10 app	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:51
43	0	(((protease activity) near3 kit) near10 substrate) near10 brain	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:52
49	0	(((protease activity) near3 kit) near10 substrate) near10 neuron	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:52
55	0	(((protease activity) near3 kit) near10 substrate) near20 (brain or neuron or nerve or alzheimer)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 19:53
31	77	((protease activity) near3 kit) near10 substrate	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 20:01
61	0	(((protease activity) near3 kit) near10 substrate) near20 amyloid	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 20:01
67	0	(((protease activity) near3 kit) near10 substrate) and amyloid	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/15 20:01

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NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
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NEWS 9	Jun 03	New e-mail delivery for search results now available
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NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
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NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
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NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
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NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 26	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27	Oct 21	EVENTLINE has been reloaded
NEWS 28	Oct 24	BEILSTEIN adds new search fields
NEWS 29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS 31	Nov 18	DKILIT has been renamed APOLLIT
NEWS 32	Nov 25	More calculated properties added to REGISTRY
NEWS 33	Dec 02	TIBKAT will be removed from STN
NEWS 34	Dec 04	CSA files on STN
NEWS 35	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36	Dec 17	TOXCENTER enhanced with additional content
NEWS 37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 38	Dec 30	ISMEC no longer available
NEWS 39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS

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  36 FILES SEARCHED...
  60 FILES SEARCHED...
L1        3345 KIT (5A) ADVANTAGE

=> s enzyme (3a) substrate
  26 FILES SEARCHED...
  52 FILES SEARCHED...
  78 FILES SEARCHED...
L2      190724 ENZYME (3A) SUBSTRATE

=> s l1 and l2
  58 FILES SEARCHED...
L3         141 L1 AND L2

=> s kit (4A) advantage
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L4        2957 KIT (4A) ADVANTAGE

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L6      157202 ENZYME (2A) SUBSTRATE

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=> s l9 and l8
  33 FILES SEARCHED...
  66 FILES SEARCHED...
L10         28 L9 AND L8

=> d l10 1-28 bib ab

L10  ANSWER 1 OF 28  USPATFULL
AN     2003:11306  USPATFULL
TI     Novel inositol polyphosphate kinase genes and uses thereof
IN     Shi, Jinrui, Johnston, IA, UNITED STATES
       Wang, Hongyu, Urbandale, IA, UNITED STATES
       Beach, Larry R., Des Moines, IA, UNITED STATES
       Rafalski, Jan Antoni, Wilmington, DE, UNITED STATES
       Cahoon, Rebecca E., Webster Groves, MO, UNITED STATES
PI     US 2003009011      A1   20030109
AI     US 2002-42894      A1   20020109 (10)
PRAI   US 2001-261465P     20010112 (60)
DT     Utility
FS     APPLICATION
LREP   PIONEER HI-BRED INTERNATIONAL INC., 7100 N.W. 62ND AVENUE, P.O. BOX
       1000, JOHNSTON, IA, 50131
CLMN   Number of Claims: 46
ECL    Exemplary Claim: 1
DRWN   No Drawings
LN.CNT 3309
AB     This invention relates to newly identified polynucleotides and
       polypeptides in the phytic acid biosynthetic pathway, variants and
       derivatives of same; methods for making the polynucleotides,
       polypeptides, variants, derivatives and antagonists. In particular the
       invention relates to polynucleotides and polypeptides of the inositol
       polyphosphate kinase gene family. In particular this invention relates
       to using the newly identified polynucleotides and polypeptides to
       modulate the phytic acid biosynthesis in such a way as to decrease
```

phytate and/or increase non-phytate phosphorous, especially in corn or soy animal feedstuffs.

L10 ANSWER 2 OF 28 USPATFULL
AN 2002:346816 USPATFULL
TI Aspartyl protease 2 (Asp2) antisense oligonucleotides
IN Gurney, Mark E., Grand Rapids, MI, United States
Bienkowski, Michael J., Portage, MI, United States
Heinrikson, Robert L., Plainwell, MI, United States
Parodi, Luis A., Stockholm, SWEDEN
Yan, Riqiang, Kalamazoo, MI, United States
PA Pharmacia & Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PI US 6500667 B1 20021231
AI US 2000-551853 20000418 (9)
RLI Division of Ser. No. US 1999-416901, filed on 13 Oct 1999
Continuation-in-part of Ser. No. US 1999-404133, filed on 23 Sep 1999
Continuation-in-part of Ser. No. WO 1999-US20881, filed on 23 Sep 1999
PRAI US 1998-101594P 19980924 (60)
US 1999-155493P 19990923 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: McGarry, Sean
LREP Pharmacia & Upjohn Attorney James D. Darnley, Jr.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 5638
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 3 OF 28 USPATFULL
AN 2002:332816 USPATFULL
TI Growth factor homolog ZVEGF4
IN Gilbert, Teresa, Seattle, WA, United States
Hart, Charles E., Woodinville, WA, United States
Sheppard, Paul O., Granite Falls, WA, United States
Gilbertson, Debra G., Seattle, WA, United States
PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
PI US 6495668 B1 20021217
AI US 2000-564595 20000503 (9)
PRAI US 1999-132250P 19990503 (60)
US 1999-164463P 19991110 (60)
US 2000-180169P 20000204 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Saoud, Christine J.; Assistant Examiner: Chernyshev, Olga N.
LREP Parker, Gary E.
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 4816
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Polypeptide growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are

disclosed. Multimers of the polypeptides are also disclosed. The polypeptides, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L10 ANSWER 4 OF 28 USPATFULL
AN 2002:311026 USPATFULL
TI Hm2 cDNA and related polypeptide
IN Briggs, Steven P., DelMar, CA, United States
Johal, Gurmukh, Columbia, MO, United States
Multani, Dilbag Singh, Columbia, MO, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
PI US 6486302 B1 20021126
AI US 2001-768585 20010124 (9)
RLI Division of Ser. No. US 1999-231227, filed on 14 Jan 1999, now patented, Pat. No. US 6211440
PRAI US 1998-71684P 19980116 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Carlson, Karen Cochrane; Assistant Examiner: Mitra, Rita
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 3250
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated Hm2 nucleic acids, and their encoded proteins. The present invention provides methods and compositions relating to altering Hm2 concentration and/or composition of plants. The invention further provides expression cassettes, host cells, transgenic plants, and antibody compositions. Also, the invention provides methods of identifying plant transformation by survival of transformed plant cells or tissues on a cyclic tetrapeptide toxin. The invention further provides methods of imparting disease resistance to plants susceptible to fungal pathogens, which utilize cyclic tetrapeptide toxins.

L10 ANSWER 5 OF 28 USPATFULL
AN 2002:302533 USPATFULL
TI Transcriptional regulator nucleic acids, polypeptides and methods of use thereof
IN Tao, Yumin, Urbandale, IA, UNITED STATES
Gordon-Kamm, William J., Urbandale, IA, UNITED STATES
Shen, Bo, Johnston, IA, UNITED STATES
Lowe, Keith S., Johnston, IA, UNITED STATES
Danilevskaya, Olga N., Johnston, IA, UNITED STATES
Mahajan, Pramod B., Urbandale, IA, UNITED STATES
Rafalski, Jan Antoni, Wilmington, DE, UNITED STATES
Sakai, Hajime, Newark, DE, UNITED STATES
Klein, Theodore M., Wilmington, DE, UNITED STATES
PI US 2002170087 A1 20021114
AI US 2001-5057 A1 20011204 (10)
PRAI US 2000-251555P 20001206 (60)
DT Utility
FS APPLICATION
LREP PIONEER HI-BRED INTERNATIONAL INC., 7100 N.W. 62ND AVENUE, P.O. BOX 1000, JOHNSTON, IA, 50131
CLMN Number of Claims: 76
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3751

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated nucleic acids and their encoded proteins that act as cell transcription inhibitors and methods of use thereof. The invention further provides expression cassettes, transformed host cells, transgenic plants and plant parts, and antibody compositions.

L10 ANSWER 6 OF 28 USPATFULL
AN 2002:243133 USPATFULL
TI Peptide mutant of human ERAB or HADH2, its X-ray crystal structure, and materials and method for identification of inhibitors thereof
IN Abreo, Melwyn A., Jamul, CA, UNITED STATES
Agree, Charles S., San Diego, CA, UNITED STATES
Aust, Robert M., Alpine, CA, UNITED STATES
Kissinger, Charles R., San Diego, CA, UNITED STATES
Margosiak, Stephen, Escondido, CA, UNITED STATES
Meng, Jerry J., San Diego, CA, UNITED STATES
Pelletier, Laura A., Escondido, CA, UNITED STATES
Rejto, Paul Abraham, Carlsbad, CA, UNITED STATES
Showalter, Richard Edward, Santee, CA, UNITED STATES
Thomson, James Arthur, San Diego, CA, UNITED STATES
Tempczyk-Russell, Anna, Ramona, CA, UNITED STATES
Vanderpool, Darin, San Diego, CA, UNITED STATES
Villafranca, Jesus Ernesto, San Diego, CA, UNITED STATES
PI US 2002132319 A1 20020919
AI US 2001-931186 A1 20010817 (9)
PRAI US 2000-226123P 20000818 (60)
DT Utility
FS APPLICATION
LREP SHANKS & HERBERT, Intellectual Property, TransPotomac Plaza, 1033 N. Fairfax Street, Suite 306, Alexandria, VA, 22314
CLMN Number of Claims: 92
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 12914
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The identification, isolation and modification of human ERAB or HADH2 is described. A crystal structure of ERAB or HADH2 is described which may be used in the discovery, identification and characterization of inhibitors or modulators of ERAB or HADH2. This structure provides a three-dimensional description of binding sites of ERAB or HADH2 for structure-based design of inhibitors or modulators thereof as therapeutic agents, for example in the treatment of Alzheimer's disease).

L10 ANSWER 7 OF 28 USPATFULL
AN 2002:217052 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., 910 Rosewood Ave. SE., Grand Rapids, MI, United States 49506
Bienkowski, Michael J., 3431 Hollow Wood, Portage, MI, United States 49024
Heinrikson, Robert L., 81 S. Lake Doster Dr., Plainwell, MI, United States 49080
Parodi, Luis A., Grevgafar 24, S-11543 Stockholm, SWEDEN
Yan, Riqiang, 5026 Queen Victoria St., Kalamazoo, MI, United States 49009
PI US 6440698 B1 20020827
AI US 2000-548367 20000412 (9)
RLI Division of Ser. No. US 1999-416901, filed on 13 Oct 1999
Continuation-in-part of Ser. No. US 1999-404133, filed on 23 Sep 1999
Continuation-in-part of Ser. No. WO 1999-US20881, filed on 23 Sep 1999

PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Turner, Sharon
LREP Marshall, Gerstein & Borun
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 5651
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 8 OF 28 USPATFULL
AN 2002:181834 USPATFULL
TI Starch synthase polynucleotides and their use in the production of new starches
IN Singletary, George W., Ankeny, IA, United States
Zhou, Lan, Johnston, IA, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
PI US 6423886 B1 20020723
AI US 1999-388743 19990902 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fox, David T.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 56
ECL Exemplary Claim: 3,4
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 3349
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated nucleic acids and their encoded proteins that are involved in starch biosynthesis. The invention further provides recombinant expression cassettes, host cells, transgenic plants, and antibody compositions. The present invention provides methods and compositions relating to altering the amount and/or morphology of starch in plants.

L10 ANSWER 9 OF 28 USPATFULL
AN 2002:175286 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses thereof
IN Gurney, Mark E., Grand Rapids, MI, United States
Bienkowski, Michael J., Portage, MI, United States
Heinrikson, Robert L., Plainwell, MI, United States
Parodi, Luis A., Stockholm, SWEDEN
Yan, Riqiang, Kalamazoo, MI, United States
PA Pharmacia & Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)
PI US 6420534 B1 20020716
AI US 2000-548372 20000412 (9)
RLI Division of Ser. No. US 1999-416901, filed on 13 Oct 1999
Continuation-in-part of Ser. No. US 1999-404133, filed on 23 Sep 1999
Continuation-in-part of Ser. No. WO 1999-US20881, filed on 23 Sep 1999
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)

DT Utility
FS GRANTED
EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Turner, Sharon
LREP Marshall, Gerstein, & Borun
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 5653
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 10 OF 28 USPATFULL
AN 2002:157035 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., Reykjavik, ICELAND
Bienkowski, Michael J., Portage, MI, UNITED STATES
Heinrikson, Robert L., Plainwell, MI, UNITED STATES
Parodi, Luis A., Stockholm, SWEDEN
Yan, Riqiang, Kalamazoo, MI, UNITED STATES
PI US 2002081634 A1 20020627
AI US 2001-681442 A1 20010405 (9)
RLI Continuation of Ser. No. US 1999-416901, filed on 13 Oct 1999, PENDING Continuation-in-part of Ser. No. US 1999-404133, filed on 23 Sep 1999, PENDING Continuation-in-part of Ser. No. WO 1999-US20881, filed on 23 Sep 1999, UNKNOWN
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)
US 1998-101594P 19980924 (60)
DT Utility
FS APPLICATION
LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 5573
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 11 OF 28 USPATFULL
AN 2002:144102 USPATFULL
TI Helical cytokine zalpha33
IN Conklin, Darrell C., Seattle, WA, United States
Gao, Zeren, Redmond, WA, United States
PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
PI US 6406888 B1 20020618
AI US 2000-593995 20000614 (9)
PRAI US 1999-139121P 19990614 (60)
DT Utility

FS GRANTED
EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Jiang, Dong
LREP Parker, Gary E.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 2391
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel cytokine polypeptides, materials and methods for making them, and method of use are disclosed. The polypeptides comprise at least nine contiguous amino acid residues of SEQ ID NO:2 or SEQ ID NO:4, and may be prepared as polypeptide fusions comprise heterologous sequences, such as affinity tags. The polypeptides and polynucleotides encoding them may be used within a variety of therapeutic, diagnostic, and research applications.

L10 ANSWER 12 OF 28 USPATFULL
AN 2002:126307 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., Grand Rapids, MI, UNITED STATES
Bienkowski, Michael J., Portage, MI, UNITED STATES
Heinrikson, Robert L., Plainwell, MI, UNITED STATES
Parodi, Luis A., Stockholm, SWEDEN
Yan, Riqiang, Kalamazoo, MI, UNITED STATES
PA Pharmacia & Upjohn Company (U.S. corporation)
PI US 2002064819 A1 20020530
AI US 2001-794925 A1 20010227 (9)
RLI Continuation of Ser. No. US 1999-416901, filed on 13 Oct 1999, PENDING
Continuation of Ser. No. US 1999-404133, filed on 23 Sep 1999, PENDING
Continuation of Ser. No. WO 1999-US20881, filed on 23 Sep 1999, UNKNOWN
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)
DT Utility
FS APPLICATION
LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 5465
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 13 OF 28 USPATFULL
AN 2002:119569 USPATFULL
TI Mammalian dishevelled-associated proteins
IN Yan, Dong, Emeryville, CA, UNITED STATES
Williams, Lewis T., Mill Valley, CA, UNITED STATES
PI US 2002061552 A1 20020523
AI US 2000-730989 A1 20001205 (9)
PRAI US 1999-172434P 19991217 (60)
DT Utility
FS APPLICATION
LREP Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097

CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 13 Drawing Page(s)
LN.CNT 2400
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Two novel proteins that interact with mammalian Dishevelled protein, and the corresponding polynucleotide sequences encoding the proteins, are disclosed. The proteins are referred to as mNkd and DAP 1A. mNkd is expressed at a higher level in mammalian lung tissues than in other mammalian tissues. mNkd inhibits Wnt signaling, and is an activator of the JNK pathway.

L10 ANSWER 14 OF 28 USPATFULL
AN 2002:109248 USPATFULL
TI Maize orthologues of bacterial RecA proteins
IN Mahajan, Pramod B., Urbandale, IA, United States
Shi, Jinrui, Johnston, IA, United States
Baszczynski, Christopher, Urbandale, IA, United States
McElver, John, Durham, NC, United States
Bowen, Benjamin, Hayward, CA, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
PI US 6388169 B1 20020514
AI US 1999-310363 19990512 (9)
PRAI US 1998-99765P 19980910 (60)
US 1998-96492P 19980814 (60)
US 1998-88529P 19980608 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Bui, Phuong T.; Assistant Examiner: Ibrahim, Medina A.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 21
ECL Exemplary Claim: 1,15
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 4093
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods and compositions relating to altering RecA content and/or composition of plants. The invention provides isolated nucleic acids and their encoded proteins that are homologous to bacterial RecA genes. The invention further provides recombinant expression cassettes, host cells, transgenic plants, and antibody compositions. The plant recA polynucleotides and their cognate products are useful for gene targeting in maize and other plant species and for use as a molecular marker.

L10 ANSWER 15 OF 28 USPATFULL
AN 2002:66664 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., Grand Rapids, MI, UNITED STATES
Bienkowski, Michael J., Portage, MI, UNITED STATES
Heinrikson, Robert L., Plainwell, MI, UNITED STATES
Parodi, Luis A., Stockholm, SWEDEN
Yan, Riqiang, Kalamazoo, MI, UNITED STATES
PA Pharmacia & Upjohn Company (U.S. corporation)
PI US 2002037315 A1 20020328
AI US 2001-794748 A1 20010227 (9)
RLI Continuation of Ser. No. US 1999-416901, filed on 13 Oct 1999, PENDING
Continuation of Ser. No. US 1999-404133, filed on 23 Sep 1999, PENDING
Continuation of Ser. No. WO 1999-US20881, filed on 23 Sep 1999, UNKNOWN
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)

DT Utility
FS APPLICATION
LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 5440
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 16 OF 28 USPATFULL
AN 2002:54665 USPATFULL
TI Glucan-containing compositions and paper
IN Nichols, Scott E., Johnston, IA, UNITED STATES
PI US 2002031826 A1 20020314
US 6465203 B2 20021015
AI US 2000-740274 A1 20001219 (9)
RLI Division of Ser. No. US 1998-210361, filed on 11 Dec 1998, PENDING Continuation-in-part of Ser. No. US 1998-9620, filed on 20 Jan 1998, GRANTED, Pat. No. US 6127603 Continuation-in-part of Ser. No. US 1998-7999, filed on 16 Jan 1998, GRANTED, Pat. No. US 6087559 Continuation-in-part of Ser. No. US 1998-8172, filed on 16 Jan 1998, GRANTED, Pat. No. US 6127602 Continuation of Ser. No. US 1995-485243, filed on 7 Jun 1995, GRANTED, Pat. No. US 5712107 Continuation of Ser. No. US 1995-478704, filed on 7 Jun 1995, ABANDONED Continuation of Ser. No. US 1995-482711, filed on 7 Jun 1995, ABANDONED
DT Utility
FS APPLICATION
LREP Catherine D. Brooke, Patent Agent, 7100 N.W. 62nd Avenue, P.O. Box 1000, Johnston, IA, 50131-1000
CLMN Number of Claims: 34
ECL Exemplary Claim: 15
DRWN No Drawings
LN.CNT 3136
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods of making paper, utilizing glucans, produced by the glucosyltransferase B, C or D enzyme of the species Streptococcus mutans, instead of modified starches. The present glucans are functionally similar to currently utilized modified starches and are particularly useful in the coating step of paper manufacture. The present glucans also exhibit thermoplastic properties and impart gloss to the paper during the coating step.

L10 ANSWER 17 OF 28 USPATFULL
AN 2002:16855 USPATFULL
TI Mammary gland chemokine
IN Labow, Mark A., Westfield, NJ, UNITED STATES
Mickanin, Craig Stephen, Basking Ridge, NJ, UNITED STATES
Bhatia, Umesh, Los Gatos, CA, UNITED STATES
PI US 2002009735 A1 20020124
AI US 2001-813492 A1 20010321 (9)
PRAI US 2000-191654P 20000323 (60)
DT Utility
FS APPLICATION
LREP THOMAS HOXIE, NOVARTIS CORPORATION, PATENT AND TRADEMARK DEPT, 564

MORRIS AVENUE, SUMMIT, NJ, 079011027
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 694
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides various methods for utilizing a polypeptide encoding a chemokine (MEC) and a polypeptide translated therefrom. The MEC chemokine is underexpressed in tumors, making the chemokine a useful marker for diagnosis and prognosis of adverse bodily reactions.

L10 ANSWER 18 OF 28 USPATFULL
AN 2001:197264 USPATFULL
TI Maize aquaporins and uses thereof
IN Jung, Rudolf, Des Moines, IA, United States
Chaumont, Francois, Louvain-la-Neuve, Belgium
Chrispeels, Maarten, La Jolla, CA, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 6313376 B1 20011106
AI US 1999-372448 19990811 (9)
PRAI US 1998-96627P 19980814 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Ibrahim, Medina A.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 40
ECL Exemplary Claim: 1,4,5,8,13
DRWN No Drawings
LN.CNT 3369
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated maize aquaporin nucleic acids and their encoded proteins. The present invention provides methods and compositions relating to altering aquaporin concentration and/or composition of plants. The invention further provides recombinant expression cassettes, host cells, transgenic plants, and antibody compositions.

L10 ANSWER 19 OF 28 USPATFULL
AN 2001:197263 USPATFULL
TI Maize aquaporins and uses thereof
IN Jung, Rudolf, Des Moines, IA, United States
Barrieu, Francois, Bordeaux, France
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
PI US 6313375 B1 20011106
AI US 1999-372422 19990811 (9)
PRAI US 1998-98692P 19980813 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Ibrahim, Medina A.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3234
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated maize aquaporin nucleic acids and their encoded proteins. The present invention provides methods and

compositions relating to altering aquaporin concentration and/or composition of plants. The invention further provides recombinant expression cassettes, host cells, transgenic plants, and antibody compositions.

L10 ANSWER 20 OF 28 USPATFULL
AN 2001:155460 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., Grand Rapids, MI, United States
Bienkowski, Michael J., Portage, MI, United States
Heinrikson, Robert L., Plainwell, MI, United States
Parodi, Luis A., Stockholm, Sweden
Yan, Riqiang, Kalamazoo, MI, United States
PA Pharmacia & Upjohn Company (U.S. corporation)
PI US 2001021391 A1 20010913
AI US 2001-794743 A1 20010227 (9)
RLI Continuation of Ser. No. US 1999-416901, filed on 13 Oct 1999, PENDING
Continuation of Ser. No. US 1999-404133, filed on 23 Sep 1999, PENDING
Continuation of Ser. No. WO 1999-US20881, filed on 23 Sep 1999, UNKNOWN
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)
DT Utility
FS APPLICATION
LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 2962
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 21 OF 28 USPATFULL
AN 2001:147690 USPATFULL
TI Substitutes for modified starch and latexes in paper manufacture
IN Nichols, Scott E., Johnston, IA, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
PI US 6284479 B1 20010904
AI US 1998-210361 19981211 (9)
RLI Continuation-in-part of Ser. No. US 1998-8172, filed on 16 Jan 1998
Division of Ser. No. US 1995-482711, filed on 7 Jun 1995, now abandoned
Continuation-in-part of Ser. No. US 1998-9620, filed on 20 Jan 1998
Continuation of Ser. No. US 1995-485243, filed on 7 Jun 1995, now patented, Pat. No. US 5712107 Continuation-in-part of Ser. No. US 1998-7999, filed on 16 Jan 1998 Division of Ser. No. US 1995-478704, filed on 7 Jun 1995, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Leary, Louise N.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 1789

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods of making paper, utilizing glucans, produced by the glucosyltransferase B, C or D enzyme of the species Streptococcus mutans, instead of modified starches. The present glucans are functionally similar to currently utilized modified starches and are particularly useful in the coating step of paper manufacture. The present glucans also exhibit thermoplastic properties and impart gloss to the paper during the coating step.

L10 ANSWER 22 OF 28 USPATFULL
AN 2001:145073 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., Grand Rapids, MI, United States
Bienkowski, Michael J., Portage, MI, United States
Heinrikson, Robert L., Plainwell, MI, United States
Parodi, Luis A., Stockholm, Sweden
Yan, Riqiang, Kalamazoo, MI, United States
PA Pharmacia & Upjohn Company (U.S. corporation)
PI US 2001018208 A1 20010830
AI US 2001-795847 A1 20010228 (9)
RLI Continuation of Ser. No. US 1999-416901, filed on 13 Oct 1999, PENDING
Continuation of Ser. No. US 1999-404133, filed on 23 Sep 1999, PENDING
Continuation of Ser. No. WO 1999-US20881, filed on 23 Sep 1999, UNKNOWN
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)
DT Utility
FS APPLICATION
LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 2995
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 23 OF 28 USPATFULL
AN 2001:139282 USPATFULL
TI Alzheimer's disease secretase, APP substrates therefor, and uses therefor
IN Gurney, Mark E., Grand Rapids, MI, United States
Bienkowski, Michael J., Portage, MI, United States
Heinrikson, Robert L., Plainwell, MI, United States
Parodi, Luis A., Stockholm, Sweden
Yan, Riqiang, Kalamazoo, MI, United States
PA Pharmacia & Upjohn Company (U.S. corporation)
PI US 2001016324 A1 20010823
AI US 2001-794927 A1 20010227 (9)
RLI Continuation of Ser. No. US 1999-416901, filed on 13 Oct 1999, PENDING
Continuation of Ser. No. US 1999-404133, filed on 23 Sep 1999, PENDING
Continuation of Ser. No. WO 1999-US20881, filed on 23 Sep 1999, UNKNOWN
PRAI US 1999-155493P 19990923 (60)
US 1998-101594P 19980924 (60)
DT Utility
FS APPLICATION

LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 5574
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the enzyme and enzymatic procedures for cleaving the .beta. secretase cleavage site of the APP protein and associated nucleic acids, peptides, vectors, cells and cell isolates and assays. The invention further provides a modified APP protein and associated nucleic acids, peptides, vectors, cells, and cell isolates, and assays that are particularly useful for identifying candidate therapeutics for treatment or prevention of Alzheimer's disease.

L10 ANSWER 24 OF 28 USPATFULL
AN 2001:117241 USPATFULL
TI Pyruvate dehydrogenase kinase polynucleotides, polypeptides and uses thereof
IN Randall, Douglas D., Columbia, MO, United States
Thelen, Jay J., Columbia, MO, United States
Miernyk, Jan A., Peoria, IL, United States
Muszynski, Michael G., Des Moines, IA, United States
Sewalt, Vincent J. H., West Des Moines, IA, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
University of Missouri, Columbia, MO, United States (U.S. corporation)
PI US 6265636 B1 20010724
AI US 1999-333423 19990615 (9)
PRAI US 1998-89998P 19980619 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Ibrahim, Medina A.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 52
ECL Exemplary Claim: 12,19
DRWN No Drawings
LN.CNT 3517
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions relating to altering carbohydrate metabolism and/or composition of plants. The invention provides isolated nucleic acids and their encoded proteins, expression cassettes, host cells, transgenic plants, and antibody compositions.

L10 ANSWER 25 OF 28 USPATFULL
AN 2001:48312 USPATFULL
TI Hm2 cDNA from maize encoding disease resistance polypeptide
IN Briggs, Steven P., DelMar, CA, United States
Johal, Gurmukh, Columbia, MO, United States
Multani, Dilbag Singh, Columbia, MO, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
The Curators of the University of Missouri, Columbia, MO, United States (U.S. corporation)
PI US 6211440 B1 20010403
AI US 1999-231227 19990114 (9)
PRAI US 1998-71684P 19980116 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Nelson, Amy J.
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 14

ECL Exemplary Claim: 2
DRWN No Drawings
LN.CNT 3025
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated Hm2 nucleic acids. The invention further provides expression cassettes, transferred host cells, and transgenic plants. Also, the invention provides methods of imparting disease resistance to plants susceptible to fungal pathogens, which utilize cyclic tetrapeptide toxins.

L10 ANSWER 26 OF 28 USPATFULL
AN 2001:29788 USPATFULL
TI Alteration of hemicellulose concentration in plants
IN Dhugga, Kanwarpal S., Johnston, IA, United States
Nichols, Scott E., Johnston, IA, United States
Fallis, Patricia Lynne, Polk City, IA, United States
PA Pioneer Hi-Bred International, Inc., Des Moines, IA, United States (U.S. corporation)
PI US 6194638 B1 20010227
AI US 1999-338671 19990622 (9)
PRAI US 1998-90416P 19980623 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Ibrahim, Medina A
LREP Pioneer Hi-Bred International, Inc.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1,11
DRWN No Drawings
LN.CNT 3616
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated Rgp nucleic acids and their encoded proteins. The present invention provides methods and compositions relating to altering RGP levels in plants. The invention further provides recombinant expression cassettes, host cells, transgenic plants, and antibody compositions.

L10 ANSWER 27 OF 28 USPATFULL
AN 83:45197 USPATFULL
TI Immobilized antibody or antigen for immunoassay
IN Cole, Francis X., Stow, MA, United States
Van Voorhis, Deborah M., Watertown, MA, United States
PA Millipore Corporation, Bedford, MA, United States (U.S. corporation)
PI US 4407943 19831004
AI US 1980-129671 19800313 (6)
RLI Continuation of Ser. No. US 1979-15724, filed on 27 Feb 1979, now abandoned which is a continuation of Ser. No. US 1978-924561, filed on 14 Jul 1978, now abandoned which is a continuation of Ser. No. US 1976-751099, filed on 16 Dec 1976, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Naff, David M.
LREP Prashker, David, Cook, Paul J.
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 791
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An antigen or antibody and an immunochemically neutral protein are immobilized in two stages on a microporous membrane coated with a protein such as zein or collagen. Immobilized antigen to Toxoplasma gondii is used in an immunoassay to detect the presence of antibody to Toxoplasma gondii in serum. Antibody that becomes bound to the

immobilized antigen is detected with an antibody- enzyme conjugate. Immobilizing the immunochemically netural protein on the membrane in a second stage immobilization step minimizes nonspecific binding during the immunoassay.

L10 ANSWER 28 OF 28 WPINDEX (C) 2003 THOMSON DERWENT
AN 2002-599469 [64] WPINDEX
DNC C2002-169300
TI Detecting activity of nucleic acid modification **enzyme**, by annealing **substrate** and labeled oligonucleotide, breaking adjacent ends, adding enzyme, incubating mixture and measuring fluorescence polarization signal.
DC B07 C07 D16
IN BAUER, M W; BERNASCONI, P; DUTCHER, R C
PA (SYGN) SYNGENTA PARTICIPATIONS AG
CYC 98
PI WO 2002046453 A2 20020613 (200264)* EN 16p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2002027982 A 20020618 (200266)
ADT WO 2002046453 A2 WO 2001-EP14123 20011203; AU 2002027982 A AU 2002-27982 20011203
FDT AU 2002027982 A Based on WO 200246453
PRAI US 2000-251230P 20001205
AB WO 200246453 A UPAB: 20021007
NOVELTY - Detecting activity of nucleic acid modification **enzyme** involves providing **substrate** having nucleic acid template and labeled oligonucleotide, annealing, breaking adjacent ends of template and labeled oligonucleotide, mixing **substrate** with **enzyme** to form reaction mixture, incubating, adding stop reagent, measuring fluorescence polarization signal (FPS) of the mixture, and comparing the signal of the mixture to the standard FPS.

DETAILED DESCRIPTION - Detecting the activity of nucleic acid modification enzymes, involves providing a substrate comprising template and a labeled oligonucleotide, where a portion of the template is complimentary to the labeled oligonucleotide and is annealed to it, providing a break between the adjacent ends of the template and the labeled oligonucleotide, mixing the substrate with an effective amount of nucleic acid modification enzyme to form a reaction mixture, incubating for a time sufficient for the enzyme to act on the substrate, optionally, adding a stop reagent, measuring the fluorescence polarization signal, and comparing the fluorescence polarization signal of the mixture to a standard fluorescence polarization signal.

An INDEPENDENT CLAIM is also included for a kit for detecting the activity of nucleic acid modification **enzymes** and its **inhibitors** comprising a substrate comprising template and a fluorescently labeled oligonucleotide, where a portion of the template is complimentary to the labeled oligonucleotide and is annealed to it and a break is located between the adjacent ends of the template and the labeled oligonucleotide, a support for retaining the substrate, an effective amount of nucleic acid modification enzyme for mixing with the substrate in the support to form a reaction mixture, optionally, a stop reagent for adding to the mixture, and device for measuring the fluorescence polarization signal of the mixture.

USE - The method is useful for detecting the activity of nucleic acid modification enzymes e.g. ligase or helicase (claimed); for screening crop protection chemicals such as herbicides, insecticides or fungicides, antibiotics, anti-viral agents, anti-tumor agents, or compounds, which

modulate and/or regulate the function of clinically important proteins, for identifying inhibitors of nucleic acid modification enzyme, for measuring DNA ligase and helicase activity as well as the effect of inhibitors on such activities, using fluorescence polarization.

ADVANTAGE - The method and **kit** are well suited for high-throughput assays. Use of fluorescein as the fluorescent label, the use of specific oligos or several oligos, the biotin/avidin as ligand for affecting a change in mass of an oligonucleotide or the set of annealed oligonucleotides, are avoided.

Dwg.0/0

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NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
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NEWS 18	Aug 08	NTIS has been reloaded and enhanced
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NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
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NEWS 27	Oct 21	EVENTLINE has been reloaded
NEWS 28	Oct 24	BEILSTEIN adds new search fields
NEWS 29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS 31	Nov 18	DKILIT has been renamed APOLLIT
NEWS 32	Nov 25	More calculated properties added to REGISTRY
NEWS 33	Dec 02	TIBKAT will be removed from STN
NEWS 34	Dec 04	CSA files on STN
NEWS 35	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36	Dec 17	TOXCENTER enhanced with additional content
NEWS 37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 38	Dec 30	ISMEC no longer available
NEWS 39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS

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  60 FILES SEARCHED...
  88 FILES SEARCHED...
L1          39 (PROTEASE ACTIVITY) (4A) KIT

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  40 FILES SEARCHED...
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L2           0 L1 (10A) (BRAIN OR NEURON OR NERVE OR ALZHEIMER)
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L3   ANSWER 1 OF 34  IFIPAT  COPYRIGHT 2003 IFI        DUPLICATE 1
AN    10243814  IFIPAT;IFIUDB;IFICDB
TI    ANTHRAX LETHAL FACTOR IS A MAPK KINASE PROTEASE
INF   Duesbery; Nicholas, Grand Rapids, MI, US
      Leppla; Stephen, Bethesda, MD, US
      Vande Woude; George, Ada, MI, US
      Webb; Craig, Rockford, MI, US
IN    Duesbery Nicholas; Leppla Stephen; Vande Woude George; Webb Craig
PAF   Unassigned
PA    Unassigned Or Assigned To Individual (68000)
AG    TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH
      FLOOR, SAN FRANCISCO, CA, 94111-3834, US
PI    US 2002187521   A1  20021212
AI    US 2002-93200       20020305
RLI   US 2000-623104       20001213 DIVISION               ABANDONED
      WO 1999-US7126       19990331 Section 371 PCT Filing PENDING
PRAI  US 1998-80330P       19980401 (Provisional)
FI    US 2002187521        20021212
DT    Utility; Patent Application - First Publication                  **
      00001000
FS    CHEMICAL
      APPLICATION
CLMN  61
GI     1 Figure(s).
     FIG. 1: Alignment of the N-terminal amino acids of MAPKK 1-4. The
      N-terminal 60 amino acids of Xenopus (X) MAPKK1, mouse (M) MAPKK1, as
      well as human (H) MAPKK 1-4 were aligned using the Multiple Sequence
      Alignment tool of the Institute for Biomedical Computing, Washington
      University, St. Louis, accessible through the internet
      (http://www.ibc.wustl.edu/ibc/ msa.html).
AB    The present invention relates to in vitro and ex vivo methods of
      screening for modulators, homologues, and mimetics of lethal factor
      mitogen activated protein kinase kinase (MAPKK) protease activity, as
      well as methods of treating cancer by administering LF to transformed
      cells.

L3   ANSWER 2 OF 34  USPATFULL
AN     2002:310778  USPATFULL
TI     Anthrax lethal factor is a MAPK kinase protease
IN     Duesbery, Nicholas, Grand Rapids, MI, United States
       Webb, Craig, Rockford, MI, United States
       Leppla, Stephen, Bethesda, MD, United States
       Woude, George Vande, Ada, MI, United States
PA     The United States of America as represented by the Department of Health
       and Human Services, Washington, DC, United States (U.S. government)
```

PI US 6485925 B1 20021126
WO 9950439 19991007
AI US 2000-623104 20001213 (9)
WO 1999-US7126 19990331
20001213 PCT 371 date
PRAI US 1998-80330P 19980401 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Walicka, M.
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 2373
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to in vitro and ex vivo methods of screening for modulators, homologues, and mimetics of lethal factor mitogen activated protein kinase kinase (MAPKK) protease activity, as well as methods of treating cancer by administering LF to transformed cells.

L3 ANSWER 3 OF 34 USPATFULL
AN 2002:144232 USPATFULL
TI Methods for altering hair growth and hair pigmentation by apoptosis in the follicular papillae and compositions therefor
IN Seiberg, Miri, Princeton, NJ, United States
Shapiro, Stanley S., Livingston, NJ, United States
Cauwenbergh, Gerard F. M. J., Plainsboro, NJ, United States
Wisniewski, Stephen J., Doylestown, PA, United States
PA Johnson & Johnson Consumer Companies, Inc., Skillman, NJ, United States (U.S. corporation)
PI US 6407056 B1 20020618
AI US 1997-882322 19970625 (8)
PRAI US 1996-21629P 19960712 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dwayne C.; Assistant Examiner: Delacroix-Muirheid, C.
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 938
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention utilizes serine proteases and their ability to induce programmed cell death and apoptosis in the follicular papillae to affect changes in mammalian hair growth and hair pigmentation. Also described are compositions which have an agent with a portion of similar structure to a portion of the trypsin molecule, allowing said agent to induce programmed cell death and apoptosis in the same manner as trypsin.

L3 ANSWER 4 OF 34 USPATFULL
AN 2001:71331 USPATFULL
TI Flea serine protease nucleic acid molecules and uses thereof
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
Gaines, Patrick J., Ft. Collins, CO, United States
Silver, Gary, Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)

PI US 6232096 B1 20010515
AI US 1997-906613 19970805 (8)
RLI Division of Ser. No. US 1996-639075, filed on 24 Apr 1996
Continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5972645, issued on 26 Oct 1999
Continuation-in-part of Ser. No. US 1995-482130, filed on 7 Jun 1995, now patented, Pat. No. US 5962257, issued on 5 Oct 1999
Continuation-in-part of Ser. No. US 1995-485443, filed on 7 Jun 1995
Continuation-in-part of Ser. No. US 1995-485455, filed on 7 Jun 1995, now patented, Pat. No. US 5712143, issued on 27 Jan 1998
Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609, issued on 16 Jun 1998
Continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994 , said Ser. No. US 326773 And Ser. No. US 906613 Continuation-in-part of Ser. No. US 326773 Continuation-in-part of Ser. No. WO 1995-US14442, filed on 18 Oct 1995
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross P.C.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 4402
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins, aminopeptidase proteins and flea cysteine protease proteins; to flea serine protease, aminopeptidase and cysteine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease, aminopeptidase and/or cysteine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 5 OF 34 USPATFULL
AN 2001:51803 USPATFULL
TI Flea leucine aminopeptidase nucleic acid molecules and uses thereof
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 6214579 B1 20010410
AI US 1998-12692 19980123 (9)
RLI Continuation of Ser. No. US 1996-639075, filed on 24 Apr 1996
Continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5972645 Continuation-in-part of Ser. No. US 1995-482130, filed on 7 Jun 1995, now patented, Pat. No. US 5962257
Continuation-in-part of Ser. No. US 1995-485443, filed on 7 Jun 1995
Continuation-in-part of Ser. No. US 1995-485455, filed on 7 Jun 1995, now patented, Pat. No. US 5712143 Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609
Continuation-in-part of Ser. No. US 806482, now patented, Pat. No. US 5356622
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.

LREP Sheridan Ross P.C.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 4292
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins, aminopeptidase proteins and flea cysteine protease proteins; to flea serine protease, aminopeptidase and cysteine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease, aminopeptidase and/or cysteine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 6 OF 34 USPATFULL
AN 2001:40225 USPATFULL
TI Flea protease proteins, nucleic acid molecules, and uses thereof
IN Stiegler, Gary L., Ft. Collins, CO, United States
Gaines, Patrick J., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 6204010 B1 20010320
AI US 1998-32215 19980227 (9)
RLI Continuation-in-part of Ser. No. US 1997-970995, filed on 14 Nov 1997
Continuation-in-part of Ser. No. WO 1997-US6121, filed on 24 Apr 1997
Continuation-in-part of Ser. No. US 1996-749699, filed on 15 Nov 1996
Continuation-in-part of Ser. No. US 1996-639075, filed on 24 Apr 1996
Continuation-in-part of Ser. No. US 1997-817795, filed on 1 Aug 1997
Continuation-in-part of Ser. No. WO 1995-US14442, filed on 18 Oct 1995
Continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5972645
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross P.C.
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins; to flea serine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 7 OF 34 USPATFULL
AN 2001:14241 USPATFULL
TI Flea leucine aminopeptidase proteins and uses thereof
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)

PI US 6180383 B1 20010130
AI US 1998-12431 19980123 (9)
RLI Continuation of Ser. No. US 1996-639075, filed on 24 Apr 1996 Continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5972645 Continuation-in-part of Ser. No. US 1995-482130, filed on 7 Jun 1995, now patented, Pat. No. US 5962257, issued on 5 Oct 1999 Continuation-in-part of Ser. No. US 1995-485443, filed on 7 Jun 1995 Continuation-in-part of Ser. No. US 1995-485455, filed on 7 Jun 1995, now patented, Pat. No. US 5712143, issued on 27 Jan 1998 Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609, issued on 16 Jun 1998 Continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994 Continuation-in-part of Ser. No. WO 1995-US14442, filed on 18 Oct 1995
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross, P.C.
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 4241
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins, aminopeptidase proteins and flea cysteine protease proteins; to flea serine protease, aminopeptidase and cysteine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease, aminopeptidase and/or cysteine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 8 OF 34 WPINDEX (C) 2003 THOMSON DERWENT
AN 2001-442283 [47] WPINDEX
DNN N2001-327124 DNC C2001-133799
TI Diagnosing (M1) a tumor in the central nervous system (CNS) of a mammal comprises contacting a bodily fluid from the mammal with a ligand that binds to an inter-alpha trypsin inhibitor polypeptide and detecting the bound complex.
DC B04 D16 S03
IN HIXSON, D C; LIM, Y
PA (RHOD-N) RHODE ISLAND HOSPITAL LIFESPAN PARTNER
CYC 95
PI WO 2001053835 A2 20010726 (200147)* EN 33p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001029739 A 20010731 (200171)
EP 1252519 A2 20021030 (200279) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
US 6489128 B1 20021203 (200301)
ADT WO 2001053835 A2 WO 2001-US2269 20010124; AU 2001029739 A AU 2001-29739 20010124; EP 1252519 A2 EP 2001-942717 20010124, WO 2001-US2269 20010124; US 6489128 B1 US 2000-491479 20000124
FDT AU 2001029739 A Based on WO 200153835; EP 1252519 A2 Based on WO 200153835

PRAI US 2000-491479 20000124

AB WO 200153835 A UPAB: 20010822

NOVELTY - Diagnosing (M1) a tumor in the central nervous system (CNS) of a mammal comprising contacting a bodily fluid from the mammal with a ligand that binds to an inter-alpha trypsin inhibitor (ITI) light chain or ITI polypeptide under conditions sufficient to form an ITI-ligand complex and detecting the complex, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) Prognosis (M2) of a tumor in the CNS of a mammal comprising:

(a) contacting a bodily fluid from the mammal with a ligand that binds to an ITI polypeptide, forming an ITI ligand complex and detecting the complex,

(b) quantitating the amount of complex to determine the level of ITI in the fluid; and

(c) comparing the level of ITI in the fluid with a normal control level of ITI where increasing the level of ITI over time indicates an adverse prognosis;

(2) A monoclonal antibody (I) that binds to an epitope of ITI light chain;

(3) A kit for diagnosis or prognosis of a tumor in the CNS comprising (I);

(4) Inhibiting (M3) metastases of a systemic cancer into the CNS of a mammal or inhibiting metastases of a primary CNS cancer comprising administering a composition which is infused into the cerebrospinal fluid of the mammal.

ACTIVITY - Cytostatic; antimetastatic.

MECHANISM OF ACTION - Serine protease inhibitor.

To evaluate the therapeutic effect of ITI as a anti-metastatic agent an in vitro three dimensional cell invasion assay was carried out. Three different cancer cell types with various degrees of invasiveness were tested. Human prostatic cancer cells, PC-3 cells, were less invasive in this assay than human leukemic assay K562. The non-metastatic human colon adenocarcinoma cell line, Clone D of DLD-1 was used as a negative control. When ITI was added to PC-3 cells, migration of the cells was inhibited. The inhibitory activity of ITI was concentration dependent and specifically abolished by the addition of mAb 69.31. In contrast addition of an unrelated antibody had little or no effect on the ability of ITI to inhibit metastases.

USE - M1 is useful for diagnosing a tumor in the central nervous system (CNS) of a mammal. M2 is useful for prognosis of a tumor in the CNS of a mammal. M3 is useful for inhibiting (M3) metastases of a systemic cancer into the CNS of a mammal or inhibiting metastases of a primary CNS cancer (all claimed).

ADVANTAGE - The method provides an accurate and reliable method of diagnosing primary brain tumors or brain metastases.

Dwg.0/4

L3 ANSWER 9 OF 34 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2

AN 2001:209134 BIOSIS

DN PREV200100209134

TI Fusion proteins, DNA molecules, vectors, and host cells useful for measuring protease activity.

AU Germann, Ursul (1); Hoock, Thomas; Kwong, Ann

CS (1) Newton, MA USA

ASSIGNEE: Vertex Pharmaceuticals Incorporated

PI US 6117639 September 12, 2000

SO Official Gazette of the United States Patent and Trademark Office Patents, (Sep. 12, 2000) Vol. 1238, No. 2, pp. No Pagination. e-file.
ISSN: 0098-1133.

DT Patent

LA English
AB The present invention relates to novel fusion proteins, DNA molecules encoding the same, vectors comprising the DNA molecules, and host cells containing the vectors for use in measuring protease activity using a novel transcriptional assay. This invention also relates to a method for determining the inhibitory activity of a compound against a protease and to a method for comparing the activity of two proteases which recognize the same cleavage site. **Kits** for assaying **protease activity** comprising DNA molecules encoding the fusion protein substrates of this invention are also contemplated.

L3 ANSWER 10 OF 34 BIOTECHABS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2001-03247 BIOTECHABS
TI Novel previn compounds useful for inhibiting the protease activity of botulinum B and tetanus toxins;
recombinant previn expression in host cell for use in botulinum toxin-B or tetanus toxin detection and poisoning therapy
AU Gordon R K; Moorad D R; Doctor B P; Garcia G E
PA U.S.Army
LO Fort Detrick, MD, USA.
PI WO 2000069891 23 Nov 2000
AI WO 2000-US13215 15 May 2000
PRAI US 1999-134446 17 May 1999
DT Patent
LA English
OS WPI: 2001-025001 [03]
AB Isolated and purified forms of Previn compounds (I) which inhibit the enzymatic activity of Botulinum toxin-B and tetanus neurotoxins are claimed. (I) have a disclosed core structure of given formula. Also claimed are: a recombinant expression system (II) comprising a nucleotide sequence encoding (I), which is capable of inhibiting the protease activity of Botulinum toxin-B or tetanus toxin and comprising a core structure of the disclosed formula, operably linked to a control sequence; a recombinant host cell (III) modified to contain (II); producing (I); antibodies specifically immunoreactive with (I); an assay utilizing an antibody; determining if an unknown compound is a previn by measuring the ability of the compound to inhibit botulinum toxin-B and tetanus toxin **protease activity**; a **kit** for treating or preventing botulinum toxin-B or tetanus toxin intoxication comprising (I); and a kit comprising an antibody for detecting tetanus toxin or botulinum toxin in a sample. (47pp)

L3 ANSWER 11 OF 34 BIOTECHABS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2000-07201 BIOTECHABS
TI Novel fusion protein comprising a protease cleavage site, a ligand binding domain and a DNA binding domain useful for characterizing proteases, detecting virus infections and screening for protease-inhibitors;
recombinant fusion protein production via vector plasmid pVgRXR-mediated gene transfer and expression in COS cell culture and protease-inhibitor isolation for cancer therapy
AU Germann U; Hoock T; Kwong A
PA Vertex-Pharm.
LO Cambridge, MA, USA.
PI WO 2000012727 9 Mar 2000
AI WO 1999-US19926 31 Aug 1999
PRAI US 1998-144759 31 Aug 1998
DT Patent
LA English
OS WPI: 2000-246756 [21]
AB A fusion protein (I) which consists of a protease cleavage site and ligand and DNA binding domains, that can bind to a reporter gene

associated ligand-responsive element in a ligand mediated manner, where (I) also consists of an expression modulator domain or associates with a second protein with an expression modulator domain that regulates the transcription of the reporter gene, is new. Also claimed are: a DNA molecule encoding (I); a vector (e.g. plasmid pVgRXR) containing the above DNA molecule; a host cell (e.g. COS cell) transfected with the vector; a method for producing (I) by culturing the host cells; methods for assaying for protease activity in vitro and in vivo; a method for determining a compounds inhibitory activity towards protease; a method for comparing the activity of 2 proteases that recognize the same cleavage site; and a **kit** for carrying out the **protease activity** assays. The above may be useful for detecting virus, cellular or microorganism proteases, for the biochemical characterization of these proteases, for diagnosing virus infection and for screening for protease-inhibitors, which may be useful for treating e.g. Alzheimer disease and cancer. (81pp)

L3 ANSWER 12 OF 34 USPATFULL
AN 2000:157179 USPATFULL
TI Flea protease proteins and uses thereof
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
Gaines, Patrick J., Ft. Collins, CO, United States
Silver, Gary, Ft. Collins, CO, United States
PA Heska Corporation, Ft.Collins, CO, United States (U.S. corporation)
PI US 6150125 20001121
AI US 1996-639075 19960424 (8)
RLI Continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5972645, issued on 26 Oct 1999 And a continuation-in-part of Ser. No. US 1995-482130, filed on 7 Jun 1995, now patented, Pat. No. US 5962257, issued on 5 Oct 1999 And a continuation-in-part of Ser. No. US 1998-485443, filed on 7 Jun 1998 And a continuation-in-part of Ser. No. US 1995-485455, filed on 7 Jun 1995, now patented, Pat. No. US 5712143, issued on 27 Jan 1998 which is a continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609, issued on 16 Jun 1998 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross, P.C.
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 9114
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins, aminopeptidase proteins and flea cysteine protease proteins; to flea serine protease, aminopeptidase and cysteine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease, aminopeptidase and/or cysteine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 13 OF 34 USPATFULL
AN 2000:153504 USPATFULL
TI Flea protease proteins
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 6146870 20001114
AI US 1995-485443 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609, issued on 16 Jun 1998 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross P.C.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3985
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease and aminopeptidase proteins; to flea serine protease and aminopeptidase nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease and/or aminopeptidase activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 14 OF 34 USPATFULL
AN 2000:145886 USPATFULL
TI Methods of eliciting an antibody response using flea protease proteins and homologs thereof
IN Grieve, Robert B., Ft. Collins, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley W., Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 6139840 20001031
WO 9611706 19960425
AI US 1997-817795 19970801 (8)
WO 1995-US14442 19951018
19970801 PCT 371 date
19970801 PCT 102(e) date
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 12 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 5533
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease and aminopeptidase proteins; to flea serine protease and aminopeptidase nucleic acid molecules, including those that encode such proteins; to antibodies

raised against such proteins; and to compounds that inhibit flea serine protease and/or aminopeptdiase activities. The present invention also includes methods to obtain such proteins, nucleic acid moelcules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 15 OF 34 USPATFULL
AN 2000:124813 USPATFULL
TI Flea aminopeptidase proteins and uses thereof
IN Grieve, Robert B., Ft. Collins, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 6121035 20000919
AI US 1997-906616 19970805 (8)
RLI Division of Ser. No. US 1996-639075, filed on 24 Apr 1996 which is a continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5972645 And a continuation-in-part of Ser. No. US 1995-482130, filed on 7 Jun 1995, now patented, Pat. No. US 5962257 And a continuation-in-part of Ser. No. US 1995-485443, filed on 7 Jun 1995 And a continuation-in-part of Ser. No. US 1995-485455, filed on 7 Jun 1995, now patented, Pat. No. US 5712143 , said Ser. No. US 484211 , said Ser. No. US 482130 , said Ser. No. US 485443 which is a continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622 , said Ser. No. US 1996-639075, filed on 24 Apr 1996 which is a continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609 And a continuation-in-part of Ser. No. WO 1995-US14442, filed on 18 Oct 1995
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross P.C.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 8902
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins, aminopeptidase proteins and flea cysteine protease proteins; to flea serine protease, aminopeptidase and cysteine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease, aminopeptidase and/or cysteine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 16 OF 34 USPATFULL
AN 2000:77203 USPATFULL
TI Flea aminopeptidase nucleic acid molecules and uses thereof
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States

Stiegler, Gary L., Ft. Collins, CO, United States
Gaines, Patrick J., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 6077687 20000620
AI US 1997-906769 19970805 (8)
RLI Division of Ser. No. US 1996-639075, filed on 24 Apr 1996 which is a continuation-in-part of Ser. No. US 1995-484211, filed on 7 Jun 1995, now patented, Pat. No. US 5922645 which is a continuation-in-part of Ser. No. US 1995-482130, filed on 7 Jun 1995, now patented, Pat. No. US 5962257 And a continuation-in-part of Ser. No. US 1995-485455, filed on 7 Jun 1995, now patented, Pat. No. US 5712143, issued on 27 Jan 1998 which is a continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609, issued on 16 Jun 1998 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994 And a continuation-in-part of Ser. No. WO 1995-US14442, filed on 18 Oct 1995 which is a continuation-in-part of Ser. No. US 1995-485443, filed on 7 Jun 1995
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Sheridan Ross P.C.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 7742
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease proteins, aminopeptidase proteins and flea cysteine protease proteins; to flea serine protease, aminopeptidase and cysteine protease nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease, aminopeptidase and/or cysteine protease activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 17 OF 34 USPATFULL
AN 2000:31211 USPATFULL
TI Fluorogenic peptides for the detection of protease activity
IN Komoriya, Akira, Rockville, MD, United States
Packard, Beverly S., Rockville, MD, United States
PA Oncoimmunin, Inc., Gaithersburg, MD, United States (U.S. corporation)
PI US 6037137 20000314
AI US 1997-802981 19970220 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: MacMillan, Keith D.; Assistant Examiner: Ricigliano, Joseph W.
LREP Majestic, Parsons, Siebert & Hsue
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 5541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity

fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

L3 ANSWER 18 OF 34 WPINDEX (C) 2003 THOMSON DERWENT
AN 2000-475705 [41] WPINDEX
DNN N2000-354888 DNC C2000-142585
TI High-throughput methods for identifying modulators of protease activity comprises exposing an alpha-donor fusion polypeptide to a protease to allow protease cleavage, and measuring the resulting beta-galactosidase activity.
DC B04 D16 S03
IN MENZEL, R; WANG, S
PA (SMAL-N) SMALL MOLECULE THERAPEUTICS INC
CYC 89
PI WO 2000039348 A1 20000706 (200041)* EN 34p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW
AU 2000022178 A 20000731 (200050)
EP 1141419 A1 20011010 (200167) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
ADT WO 2000039348 A1 WO 1999-US31026 19991223; AU 2000022178 A AU 2000-22178 19991223; EP 1141419 A1 EP 1999-966678 19991223, WO 1999-US31026 19991223
FDT AU 2000022178 A Based on WO 200039348; EP 1141419 A1 Based on WO 200039348
PRAI US 1998-113589P 19981224
AB WO 200039348 A UPAB: 20000831
NOVELTY - Identifying modulators (I) of protease activity comprising assays that detect and measure the level of beta -galactosidase activity.

DETAILED DESCRIPTION - (I) comprises:

(a) contacting a test compound with a cell or a sample comprising an alpha -donor fusion polypeptide, a protease, and an alpha -acceptor, under conditions and for a period sufficient for protease cleavage, where the alpha -donor fusion polypeptide comprises an alpha -donor in operative association with a protease substrate, and where protease cleavage of the alpha -donor fusion polypeptide results in beta -galactosidase activity;

(b) measuring the level of beta -galactosidase activity; and

(c) comparing the level of beta -galactosidase activity in (b) to the level obtained in the absence of the test compound. If the level in (b) differs from that obtained in the absence of the test compound, a compound that modulates the activity of a protease is identified.

INDEPENDENT CLAIMS are also included for the following:

(1) a cell comprising a nucleic acid molecule or molecules that express an alpha -donor fusion polypeptide, a protease, and an alpha -acceptor, where the alpha -donor fusion polypeptide has an alpha -donor in operative association with a protease substrate, and where protease cleavage of the alpha -donor fusion polypeptide results in beta -galactosidase activity;

(2) an alpha -donor fusion polypeptide comprising an alpha -donor in operative association with a protease substrate;

(3) a **kit** for identifying modulators of **protease activity**;

(4) a compound that inhibits protease activity identified by the methods; and

(5) treating a patient with an infectious disease comprising

administering to the patient an amount of a compound that inhibits the activity of the ribosomal protein identified by the methods.

USE - The method is useful for identifying compounds that modulate protease activity, as well as for assaying for protease activity. The protease modulators identified by the assays are useful as therapeutic agents against viral, bacterial or fungal infections, or cancer. Protease inhibitors or agonists identified by the method are also useful in treating contaminated items, e.g. crops, wood, metal or plastic.

ADVANTAGE - The methods are high throughput assays that are sensitive, and can be performed rapidly and without the use of radioactivity. The present method allow for the use of large, more native-like protease substrates, rather than only synthetic peptides, thus creating an assay system that more closely mimics endogenous, in vivo situations.

Dwg.0/8

L3 ANSWER 19 OF 34 WPINDEX (C) 2003 THOMSON DERWENT
AN 2000-246756 [21] WPINDEX
DNC C2000-074787
TI Novel fusion protein comprising a protease cleavage site, a ligand binding domain, and a DNA binding domain useful for characterizing proteases, detecting viral infection, and screening for protease inhibitors.
DC B04 D16
IN GERMANN, U; HOOCK, T; KWONG, A
PA (VERT-N) VERTEX PHARM INC
CYC 89
PI WO 2000012727 A1 20000309 (200021)* EN 81p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW
AU 9960234 A 20000321 (200031)
US 6117639 A 20000912 (200046)
EP 1109920 A1 20010627 (200137) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
JP 2002523102 W 20020730 (200264) 83p
ADT WO 2000012727 A1 WO 1999-US19926 19990831; AU 9960234 A AU 1999-60234 19990831; US 6117639 A US 1998-144759 19980831; EP 1109920 A1 EP 1999-968247 19990831, WO 1999-US19926 19990831; JP 2002523102 W WO 1999-US19926 19990831, JP 2000-567713 19990831
FDT AU 9960234 A Based on WO 200012727; EP 1109920 A1 Based on WO 200012727; JP 2002523102 W Based on WO 200012727
PRAI US 1998-144759 19980831
AB WO 200012727 A UPAB: 20021105
NOVELTY - Novel fusion protein (I) comprising a protease cleavage site (PCS), and ligand and DNA binding domains (LBD and DBD respectively), that binds to a reporter gene associated ligand-responsive element (LRE) in a ligand mediated manner, where (I) also comprises an expression modulator domain, or associates with a second protein with an expression modulator domain that regulates the transcription of the reporter gene.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a DNA molecule encoding a fusion protein as in (I);
(2) a vector comprising the DNA of (1);
(3) a host cell transformed with the vector of (2);
(4) producing (I) comprising culturing the host cells of (3);
(5) assaying protease activity in vitro comprising:

(a) incubating (I) in an in vitro transcription extract with a protease and a DNA molecule comprising an LRE which binds to the DBD of

(I), a promoter modulated by (I), and a reporter gene;
(b) adding a ligand which is required for the binding of (I) to the LRE or a protein binding partner; and
(c) quantifying the gene product produced from the reporter gene;
(6) assaying protease activity in a cells comprising:
(a) culturing the host cells of (3);
(b) adding a ligand as in (5.b) to the cell culture; and
(c) quantifying the gene product produced from the reporter gene;
(7) determining the inhibitory activity of a compound (TC) against a protease comprising:
(a) culturing the host cells of (3) in the absence of TC;
(b) culturing the host cells of (3) in the presence of TC;
(c) adding a ligand as in (5.b) the cultures; and
(d) comparing the amount of gene product produced by the reporter gene in the cultures of (7.a) and (7.b);
(8) comparing the activity of 2 proteases which recognize the same cleavage site comprising:
(a) culturing the host cells of (3) where the cells express a protease capable of cleaving the PCS of (I);
(b) culturing the host cells of (3) where the cells express a second protease capable of cleaving the PCS of (I);
(c) adding a ligand as in (5.b) the cultures; and
(d) comparing the amount of reporter gene product produced in the cultures of (8.a) and (8.b); and
(9) a **kit** for assaying **protease activity** comprising:
(a) a DNA molecule as in (1) or a vector as in (2);
(b) a DNA molecule comprising an LRE that can be bound by the DBD of (I), a promoter that is modulated by an expression modulating domain encoded by the DNA of (9.a), and a reporter gene controlled by the promoter ; and
(c) a ligand required for (I) t bind the LRE or a protein binding partner and modulate reporter expression.
USE - The fusion protein (I), nucleic acids, vectors and host cells encoding it, and kits comprising it are useful as agents for detecting viral, cellular, or microorganism proteases, in the biochemical characterization of these proteases, in detecting viral infection, and in the screening and identification of potential inhibitors. Protease inhibitors may be useful e.g. for treating Alzheimer's disease, cystic fibrosis, emphysema, hypertension, tumor invasion and metastasis, and viral-associated diseases.
ADVANTAGE - The assay methods are quick and simple to perform.
DESCRIPTION OF DRAWING(S) - The figure shows the structure of the vectors pVgRXR, pVgRXR-5A/5B, and pVgRXR-5A(Stop)5B.
Dwg.1/9

L3 ANSWER 20 OF 34 LIFESCI COPYRIGHT 2003 CSA
AN 2001:47001 LIFESCI
TI Fusion proteins, DNA molecules, vectors, and host cells useful for measuring protease activity
AU Germann, U.; Hoock, T.; Kwong, A.
CS Vertex Pharmaceuticals Incorporated
SO (20000912) . US Patent: 6117639; US CLASS: 435/6; 435/7.1; 435/455; 435/465; 435/471.
DT Patent
FS W3
LA English
SL English
AB The present invention relates to novel fusion proteins, DNA molecules encoding the same, vectors comprising the DNA molecules, and host cells containing the vectors for use in measuring protease activity using a novel transcriptional assay. This invention also relates to a method for

determining the inhibitory activity of a compound against a protease and to a method for comparing the activity of two proteases which recognize the same cleavage site. **Kits** for assaying **protease activity** comprising DNA molecules encoding the fusion protein substrates of this invention are also contemplated.

L3 ANSWER 21 OF 34 USPATFULL
AN 1999:132535 USPATFULL
TI Flea serine protease nucleic acid molecules
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 5972645 19991026
AI US 1995-484211 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Ross P.C., Sheridan
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3725
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease and aminopeptidase proteins; to flea serine protease and aminopeptidase nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease and/or aminopeptidase activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 22 OF 34 USPATFULL
AN 1999:121160 USPATFULL
TI Flea aminopeptidase nucleic acid molecules
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 5962257 19991005
AI US 1995-482130 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994, now patented, Pat. No. US 5766609 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Allen, Marianne P.
LREP Ross, P.C., Sheridan
CLMN Number of Claims: 8
ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3660
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease and aminopeptidase proteins; to flea serine protease and aminopeptidase nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease and/or aminopeptidase activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 23 OF 34 USPATFULL
AN 1998:115569 USPATFULL
TI Modified proenzymes as substrates for proteolytic enzymes
IN Verheijen, Johan Hendrikus, Rodenrijs, Netherlands
PA Nederlandse Organisatie voor toegepast-natuurwetenschappelijk Onderzoek TNO, Netherlands (non-U.S. corporation)
PI US 5811252 19980922
AI US 1995-499048 19950706 (8)
PRAI EP 1994-201966 19940707
DT Utility
FS Granted
EXNAM Primary Examiner: Leary, Louise
LREP Londa and Traub LLP
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 1074
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Detection or determination of a protease in a sample by incubating the sample with a substrate of the protease and observing proteolytic cleavage of said substrate. The substrate is a modified proenzyme containing a recognition site, e.g., an activation site, cleavable by said protease. Proteolytic cleavage of the modified proenzyme is detected by observing the resulting activity using a suitable substrate of the activated proenzyme. The protease may be e.g. an aspartic protease or a metalloprotease, and the modified proenzyme e.g. pro-urokinase having a mutant activation site which is cleavable by the protease to be determined.

L3 ANSWER 24 OF 34 USPATFULL
AN 1998:68539 USPATFULL
TI Use of protease inhibitors and protease vaccines to protect animals from flea infestation
IN Grieve, Robert B., Windsor, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Heath, Andrew, Sheffield, United Kingdom
Yamanaka, Miles, Sacramento, CA, United States
Arfsten, Ann, Belmont, CA, United States
Dale, Beverly, Los Altos, CA, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 5766609 19980616
AI US 1994-326773 19941018 (8)
RLI Continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622
DT Utility
FS Granted

EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Swartz, Rodney P.
LREP Sheridan Ross P.C.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2023
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method to protect a host animal from flea infestation by treating that animal with a composition that includes a compound that reduces protease activity of fleas feeding from the treated animal, thereby reducing flea burden on the animal and in the environment of the animal. The present invention also relates to compositions including flea protease vaccines, anti-flea protease antibodies and/or protease inhibitors. Also included in the present invention are soluble flea midgut preparations, flea protease proteins, nucleic acid molecules encoding such proteins and antibodies that selectively bind to such proteins. The present invention also includes methods to obtain and use such preparations, proteins, nucleic acid molecules, antibodies and protease inhibitors to protect an animal from flea infestation.

L3 ANSWER 25 OF 34 USPATFULL
AN 1998:11888 USPATFULL
TI Compositions for the detection of protease in biological samples and methods of use therefo
IN Komoriya, Akira, Rockville, MD, United States
Packard, Beverly S., Rockville, MD, United States
PA OncoImmunin, Inc., Kensington, MD, United States (U.S. corporation)
PI US 5714342 19980203
AI US 1995-549008 19951027 (8)
RLI Continuation-in-part of Ser. No. US 1994-331383, filed on 28 Oct 1994, now patented, Pat. No. US 5605809, issued on 25 Feb 1997
DT Utility
FS Granted
EXNAM Primary Examiner: Leary, Louise
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 2337
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

L3 ANSWER 26 OF 34 USPATFULL
AN 1998:9373 USPATFULL
TI Flea protease proteins, nucleic acid molecules, and uses thereof
IN Grieve, Robert B., Ft. Collins, CO, United States
Rushlow, Keith E., Ft. Collins, CO, United States
Hunter, Shirley Wu, Ft. Collins, CO, United States
Frank, Glenn R., Wellington, CO, United States
Stiegler, Gary L., Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)

PI US 5712143 19980127
AI US 1995-485455 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-326773, filed on 18 Oct 1994 which is a continuation-in-part of Ser. No. US 1991-806482, filed on 13 Dec 1991, now patented, Pat. No. US 5356622, issued on 18 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Swartz, Rodney P.
LREP Ross P.C., Sheridan
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3603
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to flea serine protease and aminopeptidase proteins; to flea serine protease and aminopeptidase nucleic acid molecules, including those that encode such proteins; to antibodies raised against such proteins; and to compounds that inhibit flea serine protease and/or aminopeptidase activities. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitors. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies, and/or inhibitors as well as the use of such therapeutic compositions to protect a host animal from flea infestation.

L3 ANSWER 27 OF 34 USPATFULL
AN 97:15966 USPATFULL
TI Compositions for the detection of proteases in biological samples and methods of use thereof
IN Komoriya, Akira, Rockville, MD, United States
Packard, Beverly S., Rockville, MD, United States
PA Oncoimmunin, Inc., Rockville, MD, United States (U.S. corporation)
PI US 5605809 19970225
AI US 1994-331383 19941028 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Hollinden, Gary E.; Assistant Examiner: Leary, Louise
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1931
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

L3 ANSWER 28 OF 34 WPINDEX (C) 2003 THOMSON DERWENT
AN 1997-179174 [16] WPINDEX
DNC C1997-057668
TI Modifying peptide containing fluorescing and quenching groups - useful for assaying hepatitis C virus NS3 protease activity in presence of NS4A peptide.

DC B04 D16
IN MASUHO, Y; SHIMIZU, Y; SHIMOTOHNO, K; YAMAJI, K
PA (RATI-N) RATIONAL DRUG DESIGN LAB
CYC 71
PI WO 9708194 A1 19970306 (199716)* JA
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN
AU 9667541 A 19970319 (199728)
JP 09510103 X 19980922 (199848)
ADT WO 9708194 A1 WO 1996-JP2343 19960822; AU 9667541 A AU 1996-67541 19960822; JP 09510103 X WO 1996-JP2343 19960822, JP 1997-510103 19960822
FDT AU 9667541 A Based on WO 9708194; JP 09510103 X Based on WO 9708194
PRAI JP 1995-217950 19950825
AB WO 9708194 A UPAB: 19970417
A modifying peptide (I) is provided for assaying hepatitis C virus NS3 protease activity in the presence of a peptide derived from hepatitis C virus NS4A. The modifying peptide has fluorescing and quenching gps each covalently attached to functional gps. and contains the aminoacid sequence of formula X-Asp-Lys-Ile-Val-Pro-Cys-Ser-Met-Ser-Y-Lys in between the residues bonded to each of the fluorescing gp and the quenching gp. In the formula, X = a single bond or Lys and Y = a single bond or Tyr.
USE - (I) is used for assaying hepatitis C virus NS3 **protease activity**. A **kit** for the assay is claimed. (I) is also useful for screening NS3 protease inhibitors which are useful as anti HCV agents.
ADVANTAGE - Assays can be carried out rapidly and with high sensitivity. Multiple processing is possible.
Dwg.1/6

L3 ANSWER 29 OF 34 BIOTECHABS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1997-02492 BIOTECHABS
TI Human proteasome subunit P40;
recombinant protein production for use in antibody production for use in immune disease diagnosis and therapy
PA Sumitomo-Elec.
LO Japan.
PI JP 08308567 26 Nov 1996
AI JP 1995-121484 19 May 1995
PRAI JP 1995-121484 19 May 1995
DT Patent
LA Japanese
OS WPI: 1997-059690 [06]
AB A human proteasome subunit P40 protein of disclosed protein sequence is claimed. Also claimed are: a polynucleotide encoding the protein and having the disclosed DNA sequence; a polypeptide derived from the protein with a mutation or variation making a proteasome containing the polypeptide have **protease activity**; and a **kit** for diagnosis of diseases, by determining proteasome subunit P40 by detecting the specific reaction of the subunit with its antibody. The kit can be used for immune disease diagnosis and therapy. In an example, a human proteasome subunit P40 gene was sequenced. A DNA probe was prepared and the protein sequence of the P40 subunit was determined. A cDNA probe and a cDNA library were prepared. The library was expressed in Escherichia coli. A polyclonal antibody specific for human proteasome subunit P40 was prepared. The expression of mRNA of proteasome subunit P40 was analyzed. The expression was high in heart and bone muscle and low in brain, lung, liver, pancreas and placenta. (15pp)

L3 ANSWER 30 OF 34 USPATFULL

AN 94:44737 USPATFULL
TI Isolated nucleotide sequences encoding an: antigen binding site of monoclonal antibody PD41; and antigen associated with prostate adenocarcinomas
IN Wright, Jr., George L., Norfolk, VA, United States
PA Eastern Virginia Medical School of Medical College of Hampton Roads, Norfolk, VA, United States (U.S. corporation)
PI US 5314996 19940524
AI US 1993-91628 19930713 (8)
RLI Division of Ser. No. US 1992-828057, filed on 30 Jan 1992, now patented, Pat. No. US 5227471
DT Utility
FS Granted
EXNAM Primary Examiner: Lacey, David L.; Assistant Examiner: Adams, Arnold E.
LREP Pennie & Edmonds
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1339
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Monoclonal antibodies that bind specifically to prostate carcinoma and do not bind substantially to normal prostate or benign prostatic hyperplasia, as well as hybridoma cell lines producing the monoclonal antibodies are disclosed. In one embodiment, a monoclonal antibody designated MAb PD41 is disclosed. A new antigen designated prostate mucin antigen is disclosed in isolated, substantially pure form. In addition, methods for using the hybridoma cell lines, the monoclonal antibody and/or the antigen for diagnosis, prophylaxis and/or treatment of prostate carcinoma are disclosed.

L3 ANSWER 31 OF 34 USPATFULL
AN 93:57012 USPATFULL
TI Monoclonal antibody PD41 that binds to a prostate mucin antigen that is expressed in human prostatic carcinoma
IN Wright, Jr., George L., Norfolk, VA, United States
PA Eastern Virginia Medical School of the Medical College of Hampton Roads, Norfolk, VA, United States (U.S. corporation)
PI US 5227471 19930713
AI US 1992-828057 19920130 (7)
DT Utility
FS Granted
EXNAM Primary Examiner: Lacey, David L.; Assistant Examiner: Adams, Donald E.
LREP Pennie & Edmonds
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1358
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Monoclonal antibodies that bind specifically to prostate carcinoma and do not bind substantially to normal prostate or benign prostatic hyperplasia, as well as hybridoma cell lines producing the monoclonal antibodies are disclosed. In one embodiment, a monoclonal antibody designated MAb PD41 is disclosed. A new antigen designated prostate mucin antigen is disclosed in isolated, substantially pure form. In addition, methods for using the hybridoma cell lines, the monoclonal antibody and/or the antigen for diagnosis, prophylaxis and/or treatment of prostate carcinoma are disclosed.

L3 ANSWER 32 OF 34 IFIPAT COPYRIGHT 2003 IFI DUPLICATE 4
AN 2316811 IFIPAT;IFIUDB;IFICDB
TI METHOD OF DETECTING HIV PROTEASE ACTIVITY; IDENTIFYING PROTEASE INHIBITOR BY COMBINING A SUBSTRATE, PROTEASE, AN ANTIBODY AND A SUSPECTED PROTEASE

INHIBITOR AND DETECTING ANTIBODIES BOUND WITH REACTIVE CLEAVAGE PRODUCT
INF Sharma, Satish K, Portage, MI
IN Sharma Satish K
PAF The Upjohn Company, Kalamazoo, MI
PA Upjohn Co The (87912)
EXNAM Nucker, Christine M
EXNAM Dubrule, Chris
AG DeLuca, Mark
PI US 5171662 19921215 (CITED IN 013 LATER PATENTS)
AI US 1991-680679 19910404
XPD 13 Sep 2010
RLI US 1990-581715 19900913 CONTINUATION-IN-PART ABANDONED
FI US 5171662 19921215
DT UTILITY; REASSIGNED
FS CHEMICAL
GRANTED
OS CA 118:142537
MRN 005789 MFN: 0293
CLMN 22
AB A method for identifying compounds that inhibit HIV protease is disclosed. A substrate that comprises an HIV protease cleavage site is combined with HIV protease and test compounds. Cleavage of the substrate indicates protease activity and can be detected using antibodies against a cleavage product which do not cross react with uncleaved substrate. A method of detecting the presence of anti-HIV protease antibodies in a sample is also disclosed. A substrate is combined with the sample and HIV protease. Detection of substrate cleavage indicates that the protease is active and that there is an absence of neutralizing anti-HIV protease antibodies.

L3 ANSWER 33 OF 34 WPINDEX (C) 2003 THOMSON DERWENT
AN 1991-376740 [51] WPINDEX
DNC C1991-162457
TI Evaluating extrinsic and intrinsic coagulation factors - in factor XA assay by use of anti-factor antibodies blocking either pathway.
DC B04 C03 D16
IN POLLARD, H B
PA (USDC) US DEPT OF COMMERCE; (USSH) US DEPT HEALTH & HUMAN SERVICE
CYC 18
PI US 685072 A0 19911112 (199151)*
WO 9218539 A1 19921029 (199246) EN 40p
RW: AT BE CH DE DK ES FR GB GR IT LU MC NL SE
W: AU CA JP
AU 9218796 A 19921117 (199310)
ADT US 685072 A0 US 1991-685072 19910415; WO 9218539 A1 WO 1992-US2813 19920414; AU 9218796 A AU 1992-18796 19920414, WO 1992-US2813 19920414
FDT AU 9218796 A Based on WO 9218539
PRAI US 1991-685072 19910415
AB US N7685072 N UPAB: 20011211
A method for evaluating the contribution of an extrinsic or intrinsic coagulation factor to a factor Xa assay comprises, (a) incubating a biological sample with antisera contg. anti-factor VII, anti-factor VIII, anti-factor IX, or anti-factor VII, anti-factor VIII, and anti-factor IX under conditions such that antibody/antigen binding can occur, (b) adding factor IX a and factor X, and incubating under conditions such that factor Xa is formed, (c) adding a chromogenic substrate, and (d) assay for change in substrate (c).

USE/ADVANTAGE - The assay is used for the above purpose for cell extracts and plasma from mammals including humans, cattle, and pigs. The required assay materials are ref. brought together as a test kit. Although some measurements on coagulation are at present readily made with the aid of a CONTEST **kit** for factor Xa **protease**

activity and factor VIII, other assays, of the tedious biological type, are run to amplify the results. Using the new positive method, the CONTEST kit results can be expanded to provide maximum information for the clinician without need of bioassays.

L3 ANSWER 34 OF 34 USPATFULL
AN 85:8947 USPATFULL
TI Chymopapain allergen and method
IN Calenoff, Emanuel, Burlingame, CA, United States
Jones, Ruth M., Redwood City, CA, United States
Tsay, Yuh-Geng, San Jose, CA, United States
Beigler, Myron A., Los Altos Hills, CA, United States
PA Axonica, Inc., Mt. View, CA, United States (U.S. corporation)
PI US 4499065 19850212
AI US 1983-489898 19830429 (6)
DT Utility
FS Granted
EXNAM Primary Examiner: Shapiro, Lionel M.
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CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 509
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A chymopapain derivative having the enzymatic activity reduced by at least 95% while retaining the original allergenic activity of at least 90% is suitable for skin testing to detect allergic hypersensitivity to chymopapain and for treating patients exhibiting allergic hypersensitivity to chymopapain. The enzymatic activity can be blocked by reacting thiol groups of the enzyme with and iodoacetic acid, bromoacetic acid, or a salt, ester or amide derivative thereof, under conditions which block the undesirable enzymatic activity while retaining the desired allergenic activity.